

# Notice of Allowability

Application No.

10/510,549

Examiner

Greg F. Cunningham

Applicant(s)

ASAI ET AL.

Art Unit

2624

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendment received 4/09/2007.
2. ☒ The allowed claim(s) is/are 1-17, 19 and 20.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☒ All b) ☐ Some\* c) ☐ None of the:
    1. ☒ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

### **DETAILED ACTION**

1. This action is responsive to amendment filed 4/09/2007.
2. The disposition of the claims is as follows: claims 1-17, 19 and 20 are pending in the application. Claims 1, 15, 17, 19 and 20 are independent claims. Claim 18 has been cancelled.

### ***Claim Rejections - 35 USC § 101***

3. In view of the amended claims, 101 rejections are withdrawn.

### ***Allowable Subject Matter***

4. Claims 1-17, 19 and 20 are allowed.
5. The following is an examiner's statement of reasons for allowance:

Reasons for allowance were given in prior office action and repeated here.

Applicant's independent claims 1 and 15 and amended independent claim 17 stand novel over the related prior art. For instance, the related art of Koyama et al. (U.S. 6,542,161 B1), hereinafter Koyama, does make use of scaled skeleton data that would never extend over a grid, unlike the case of a scaling operation from an outline font. A basic portion of the character is defined based on the scaled skeleton data. The color element level of each sub-pixel corresponding to the basic portion of the character is set to the maximum color element level (in this example, level 7). Thus, according to the generation of a character pattern based on a skeleton data, the character pattern necessarily includes a portion which is set to the maximum color element level. As a result, it is possible to clearly display the character.

However, Koyama does not disclose a control portion shifting section capable of controlling shift of a center of the skeleton portion toward a center of the frame in a predetermined direction on the display screen as claimed in independent claim 1. Nor does Koyama disclose shifting the skeleton portion of the symbol information in a subpixel arrangement direction within the frame on a subpixel-by-subpixel basis; and assigning a predetermined color factor level to a subpixel corresponding to the skeleton portion of the symbol information, and assigning at least one color factor level stepwise lower than the predetermined color factor level of the subpixel corresponding to the skeleton portion to at least one neighboring subpixel outside the skeleton portion as disclosed in independent claim 15.

Claims 2-14, 19 and 16 depend from allowable independent claims 1 and 15, respectively, and therefore are also allowed.

Claims 19 and 20 act as independent claims for claims 1 and 2, respectively, and are directed to an apparatus, respectively, for the display apparatus of independent claim 1 and dependent claim 2, and therefore are allowable according to independent claim 1 and dependent claim 2.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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***Responses***

7. Responses to this action should be mailed to: Commissioner of Patents and Trademarks, Washington, D.C. 20231. If applicant desires to fax a response, (703) 872-9306 may be used for formal communications.

***Inquiries***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gregory F. Cunningham whose telephone number is (571) 272-7784.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Bella can be reached on (571) 272-7778. The fax phone number for the organization where this application or proceeding is assigned is **571-273-8300**.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*G.F. Cunningham*

Greg Cunningham

Examiner, Art Unit 2624

*Matthew C. Bella*

MATTHEW C. BELLA  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600

6/26/2007